

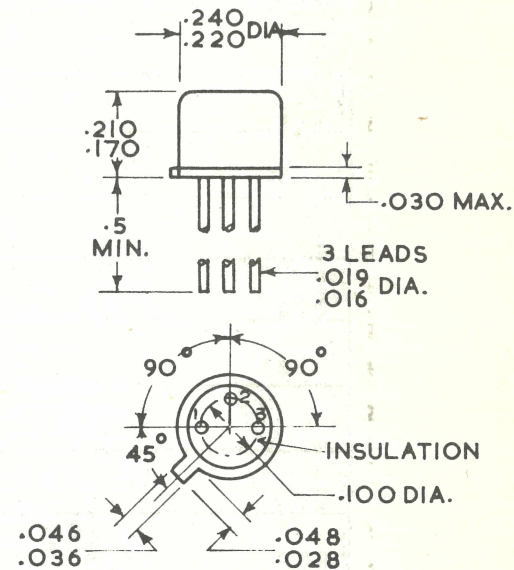


AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

Note Equivalent  
2N3241A  
AS205  
AS209

The AS205 and AS209 are n-p-n silicon planar epitaxial transistors for audio and general purpose use in consumer and professional equipment. The AS205 features low saturation voltage (less than 0.3 volt at 300mA). These transistors are in the TO-104 package outline, but with three leads. The collector is connected to the shell.

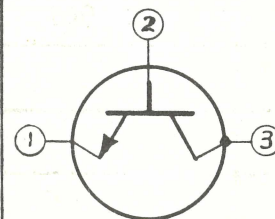
#### DIMENSIONAL OUTLINE



#### ABSOLUTE MAXIMUM RATINGS

Collector-base voltage	=	20 volts
Collector-emitter voltage	=	20 volts
Emitter-base voltage	=	5 volts
Emitter current	=	350mA
Base current	=	30mA

#### TERMINAL DIAGRAM



Lead 1-Emitter  
Lead 2-Base  
Lead 3-Collector Case

#### THERMAL RATINGS

Dissipation at case temperatures up to 75°C ----- 2W max.  
Derate linearly to zero at 175°C.

Dissipation in an ambient temperature up to 25°C 500mW max.  
Derate linearly to zero at 175°C.

During soldering lead temperature must not exceed 255°C for 10 secs. max. with 1/16" of can.

Storage temperature -65°C to 175°C.

# CHARACTERISTICS AT 25°C

AS205

AS209

PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
$I_{CB0}$	$V_{CB} = 12V$			450	nA
$I_{EB0}$	$V_{EB} = 2.5V$			450	nA
$V_{EBF}$	$V_{CB} = 25V$			1	V
$V_{CE0}$	$I_C = 10mA$	20			V
$I_B$	$V_{CE} = 10V, I_E = 10mA$	33		167	$\mu A$
$f_T$	$V_{CE} = 10V, I_E = 10mA$		175		MHz
$C_{b'c}$	$V_{CB} = 6V, I_E = 0$		12		pF
	AS205				
$I_{CB0}$	$V_{CB} = 25V$			100	nA
$I_{EB0}$	$V_{EB} = 2.5V$			100	nA
$V_{CE(sat.)}$	$I_C = 300mA, I_B = 15mA$		0.24	0.3	V
	AS209				
$V_{CE(sat.)}$	$I_C = 100mA, I_B = 5mA$		0.1	0.2	V

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